

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JOHN F. PELTON

Appeal No. 95-1724
Application No. 08/011,604¹

ON BRIEF

Before KIMLIN, JOHN D. SMITH and GARRIS, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed February 1, 1993. According to appellant, this application is a division of Application No. 07/845,324 filed March 3, 1992, now U.S. Patent No. 5,198,180 issued March 30, 1993; which is a division of Application No. 07/656,849 filed February 19, 1991, now U.S. Patent No. 5,234,202 issued August 10, 1993.

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This is a decision on an appeal from the final rejection of claims 1 through 16 which are all of the claims remaining in the application.

The subject matter on appeal relates to an insulated refractory lined refining chamber for aluminum refining being adapted for the positioning of a spinning nozzle assembly therein for the injection of sparging gas into a body of molten aluminum present in the chamber wherein the improvement consists essentially of vertical, refractory baffle means positioned at the floor of and across said refining chamber so as to be located under a rotor portion of said spinning nozzle assembly upon placement of said spinning nozzle assembly in the refining chamber. This appealed subject matter is adequately illustrated by independent claim 1 which reads as follows:

1. In an insulated refractory lined refining chamber for aluminum refining, having side walls and a floor and being adapted for the positioning of a spinning nozzle assembly therein for the injection of sparging gas into a body of molten aluminum present in the chamber during aluminum refining operations, said insulated refractory lined refining chamber having no gas inlet means in the side wall thereof, the improvement consisting essentially of vertical, refractory baffle means positioned at the floor of and across said refining chamber, so as to be located under a rotor portion of said spinning nozzle assembly upon placement of said spinning

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nozzle assembly in the refining chamber for the injection of sparging gas into the body of molten aluminum therein, whereby said baffle means serves to change the flow pattern of the body of molten aluminum within the refining chamber upon the use thereof for refining operations so as to enable higher gas flows and/or nozzle rotating speeds to be employed without excessive surface turbulence of said molten aluminum, thereby enabling increased refining rates to be achieved in said refining chamber.

The references relied upon by the examiner as evidence of obviousness are:

Heuer 1942	2,290,961	Jul. 28,
Bruno et al. (Bruno) 1974	3,839,019	Oct. 1,
Szekely 1975	3,870,511	Mar. 11,
Ivanov et al. (Ivanov) 1985	4,526,761	Jul. 2,

The examiner has advanced on this appeal the following rejections under 35 U.S.C. § 103:

Claims 1, 2, 4 through 8 and 15 over Heuer;

Claims 1 through 5, 7 through 13, 15 and 16 over Szekely;

Claims 1 through 5 and 7 through 15 over Bruno; and

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Claim 16 over each of the above noted references and further in view of Ivanov.

We refer to the several briefs and answers of record for a complete exposition of the opposing viewpoints expressed by the appellant and the examiner concerning the above noted rejections.

As a preliminary matter, we note that the appealed claims have been separately grouped and argued in the manner indicated on page 3 of the principal Brief, and we will appropriately consider the separately grouped and argued claims in our opinion below.

OPINION

For the reasons which follow, we will sustain only the § 103 rejection of claims 1, 2, 4 through 8 and 15 as being unpatentable over Heuer, and concomitantly we will not sustain any of the other § 103 rejections before us on this appeal.

Concerning the rejection based on the Heuer reference, we discern nothing in the apparatus defined by appealed claim 1 which distinguishes over the apparatus disclosed in the

reference. We appreciate, of course, the appellant's point that his claimed chamber is used for refining aluminum whereas the chamber of Heuer is used for the manufacture of pig iron. However, this difference in use does not distinguish the apparatus of appealed claim 1 from the apparatus of Heuer for it is well settled that the manner or method in which a machine or apparatus is to be utilized is not germane to the issue of patentability of the machine or apparatus itself. In re Casey, 370 F.2d 576, 580, 152 USPQ 235, 238 (CCPA 1967).

Additionally, the appellant argues that his claim 1 baffle means distinguishes over the thicker portion of Heuer's refractory lining 21 (e.g., see Figures 1 and 6 of the reference drawing). In this regard, the appellant emphasizes that his baffle means is intended to be positioned under and to function in cooperation with a spinning nozzle assembly whereas patentee's thicker refractory portion is surmised to be employed "because such portion of the lining is subject to greater wear and tear upon the introduction of a molten charge of pig iron onto the bottom portion of the lining at this point" (Brief, page 4). This argument does not persuade us

that the apparatus defined by appealed claim 1 is distinguishable over the Heuer apparatus.

For the reasons previously indicated, the fact that appellant's baffle means and patentee's thicker refractory portion may be used for different purposes is not germane to the issue of patentability which is before us on this appeal. What is germane is the fact that the baffle means and thicker refractory portion are structurally indistinguishable.

Moreover, we cannot agree with the appellant's position that the location of his claim 1 baffle means distinguishes over the location of Heuer's thicker refractory portion. We here reiterate the examiner's point that the appealed claims do not require a spinning nozzle assembly. Instead, the independent claim on appeal simply recites that the claimed chamber is "adapted for the positioning of a spinning nozzle assembly therein" and that the claimed refractory baffle means is positioned "so as to be located under a rotor portion of said spinning nozzle assembly upon placement of said spinning nozzle assembly in the refining chamber for the injection of sparging gas into the body of molten aluminum therein."

Plainly, the chamber of Heuer's apparatus is "adapted" for the

positioning of an assembly at charging opening 24 as evinced by a comparison of Figures 1 and 6. That is, an assembly such as a spinning nozzle assembly is capable of being positioned at this charging opening. Further, the location of patentee's thicker refractory portion is explicitly shown to be under this charging opening and therefore corresponds to the location defined by appealed claim 1.

For the above stated reasons, it is our determination that the independent claim on appeal fails to structurally distinguish the chamber defined thereby from the chamber disclosed by Heuer notwithstanding the appellants' arguments to the contrary.

We also are unconvinced by the appellant's arguments that dependent claims 4, 5, 7 and 8 are patentable over Heuer. In our view, it would have been obvious for one with ordinary skill in the art to provide patentee's thicker refractory portion with height dimensions within the ranges defined by dependent claims 4 and 5, for example, in order to militate against the greater wear and tear to which this portion of the refractory lining is subjected. As for claims 7 and 8, the distance between the baffle means and rotor which is defined

by these claims is determined by the lengthwise positioning of the spinning nozzle assembly after it is placed in the here claimed chamber. Concerning this matter, it is appropriate to reiterate the earlier mentioned point that the appealed claims do not require the chamber to include the spinning nozzle assembly. It follows that the distance feature of the claims under review relates to a future intended placement of the assembly. With this in mind, we re-emphasize our earlier observation that Heuer's chamber is "adapted" for the positioning of an assembly at the charging opening thereof, and such positioning would enable the lengthwise disposition of the assembly to be located at the here claimed distance from patentee's raised refractory portion.

In light of the foregoing, we will sustain the examiner's § 103 rejection of claims 1, 2, 4 through 8 and 15 as being unpatentable over Heuer.

However, we cannot sustain the examiner's § 103 rejection of claim 16 (which requires the baffle means to be of an "essentially triangular cross section") as being unpatentable over Heuer in view of Ivanov. The examiner concludes that it would have been obvious to provide Heuer with a triangular

shaped baffle of the type shown by Ivanov in order to "improve the circulation" (Answer, page 6). However, the applied references contain no teaching or suggestion that it would be desirable and thus obvious to "improve the circulation" in Heuer's apparatus via a triangular shaped baffle of the type shown by Ivanov. Significantly, it is the appellant rather than Heuer who discloses use of a triangular shaped baffle in order to "improve the circulation." As a consequence, it is our determination that the examiner's conclusion is inappropriately based upon impermissible hindsight derived from the appellant's own disclosure rather than some teaching, suggestion or incentive derived from the applied prior art.

The rejections based upon Szekely and Bruno also cannot be sustained. Contrary to the examiner's belief, the chambers disclosed in these references are not adapted for the positioning of a spinning nozzle assembly therein at a location such that a refractory baffle means is located under the assembly. In all of the embodiments shown in these references, the baffles are disposed under a portion of the chamber which is quite plainly not adapted for the positioning of a spinning nozzle assembly. For example, it is the

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examiner's position that Bruno's chamber contains "a turbine blade which is located above at least a position [sic, portion?] of baffle 32" (Supplemental Examiner's Answer, page 3). As correctly indicated by the appellant, however, Figure 1 of Bruno clearly shows patentee's turbine blade to be located substantially to the left of, rather than above as urged by the examiner, baffle 32.

It follows that we cannot sustain the examiner's § 103 rejection of claims 1 through 5, 7 through 13, 15 and 16 as being unpatentable over Szekely or his § 103 rejection of claims 1 through 5 and 7 through 15 as being unpatentable over Bruno. Furthermore, since the above discussed deficiencies of these references are not supplied by Ivanov, we also cannot sustain the examiner's § 103 rejection of claim 16 as being unpatentable over Szekely and Bruno in view of Ivanov.

In summary, we have sustained the rejection of claims 1, 2, 4 through 8 and 15 as being unpatentable over Heuer but have not sustained any of the other rejections advanced by the examiner on this appeal.

The decision of the examiner is affirmed-in-part.

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED-IN-PART

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN D. SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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BRADLEY R. GARRIS)	
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